

NOAA In Your State

New Hampshire

NOAA is an agency that enriches life through science. Our reach goes from the surface of the sun to the depths of the ocean floor as we work to keep citizens informed of the changing environment around them. From daily weather forecasts, severe storm warnings, and climate monitoring to fisheries management, coastal restoration and supporting marine commerce, NOAA's products and services support economic vitality and affect more than one-third of America's gross domestic product. NOAA's dedicated scientists use cutting-edge research and high-tech instrumentation to provide citizens, planners, emergency managers and other decision makers with reliable information they need when they need it.

The following is a summary of NOAA programs based in, and focused on, your state or territory. The entries are listed by statewide, region, and then by congressional districts and cities or towns.

NH

Statewide

National Marine Fisheries Service (NMFS) - [Bay-Watershed Education and Training Program](#)

The NOAA Bay-Watershed Education and Training (B-WET) Program is an environmental education program that promotes locally relevant, experiential learning in the K-12 environment. The primary delivery of B-WET is through competitive funding that promotes Meaningful Watershed Educational Experiences (MWEEs). The New England B-WET Program recognizes that knowledge and commitment built from firsthand experience, especially in the context of one's community and culture, is essential for achieving environmental stewardship. New England B-WET responds to regional education and environmental priorities through local implementation of competitive grant funds.

National Marine Fisheries Service (NMFS) - [Northeast Fisheries Science Center](#)

NMFS is responsible for the management, conservation and protection of living marine resources within the United States' Exclusive Economic Zone (water three to 200 mile offshore). Using the tools provided by the *Magnuson-Stevens Act*, NMFS assesses and predicts the status of fish stocks, develops and ensures compliance with fisheries regulations, restores and protects habitat and works to reduce wasteful fishing practices, and promotes sustainable fisheries. Under the *Marine Mammal Protection Act* and the *Endangered Species Act*, NMFS recovers protected marine species (e.g. whales, turtles).

The Greater Atlantic Regional Fisheries Office (located in Gloucester, MA) includes divisions that promote sustainable fisheries, habitat conservation, and recovery of protected species, and conducts statistical analysis and programs supporting these divisions. Key fish species managed in the Greater Atlantic Region include the northeast “multispecies complex” (cod, haddock, yellowtail flounder etc.), Atlantic sea scallops, herring, lobster, and summer flounder. Key marine endangered species in this region are northern right whales, Kemp’s ridley sea turtles, Atlantic salmon and Atlantic and shortnose sturgeon. NMFS is the lead agency coordinating the Large Whale and Sea Turtle Disentanglement Program activities and the Marine Mammal Health and Stranding Response Program activities. The core functions of these programs include coordinating volunteer networks to: respond to entanglements and strandings, investigate mortality events, and conduct biomonitoring, tissue/serum banking, and analytical quality assurance.

The Northeast Fisheries Science Center (headquartered in Woods Hole, MA) focuses on collection, analysis, and presentation of scientific information about the Northeast Shelf ecosystem, its condition, and its marine life. In addition to its five laboratories, the Center uses four research vessels to support its work. They are: the NOAA ships *Henry B. Bigelow*, and the small research vessels *Gloria Michelle*, *Victor Loosanoff*, and *Nauvoo*. The Greater Atlantic Regional Fisheries Office and the Science Center are responsible for the District of Columbia and the following states: Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, and North Carolina; and the inland states of Vermont, Minnesota, Michigan, Wisconsin, Illinois, Indiana, Ohio, and West Virginia.

National Marine Fisheries Service (NMFS) - [Restoration Center](#)

NMFS Restoration Center works with private and public partners in New Hampshire to construct fish ladders, remove dams, widen bridges and culverts to improve tidal flushing in coastal wetlands, restore shellfish and submerged aquatic vegetation beds, and control invasive species. There are currently 4 active projects in New Hampshire supported by the NOAA Restoration Center. All of these projects are focused on restoring enhancing migratory passage to spawning habitat for anadromous blueback herring and alewife. An example of this work is NOAA’s partnership with the Town of Exeter to remove the Exeter Great Dam. In addition to providing enhanced fish passage, the project will reduce flood elevations in the downtown area of Exeter. Removal of this dam is targeted for 2016.

National Ocean Service (NOS) - [Coastal Management Fellowship](#)

This program matches postgraduate students with state and territory coastal zone programs to work on two-year projects proposed by the state or territory. The New Hampshire Coastal Program is hosting a fellow working to systematically integrate social science into ecosystem management for New Hampshire’s estuaries.

National Ocean Service (NOS) – [Office for Coastal Management](#)

The NOAA Office for Coastal Management practices a partner-based, boots-on-the ground regional approach to coastal management, with staff available in the eight regions. Assistance is provided to local, state, and regional coastal resource management efforts. Constituent feedback and assessments are an important part of the effort. New England staff are located in Durham, New Hampshire, Gloucester and Scituate, Massachusetts and Yarmouth, Maine. These employees represent NOAA on several regional ocean governance initiatives (e.g., Northeast Regional Ocean Council, Gulf of Maine Council, Northeast Regional Planning Body), coordinate NOAA involvement in ocean observing system activities, and support research reserves, coastal zone management, and other NOAA and state coordinated activities.

National Ocean Service (NOS) - [Northeast Regional Ocean Council](#)

To maintain quality constituent service, the NOAA Office for Coastal Management staff in this region work with the Northeast Regional Ocean Council and the coastal states on this board by representing NOAA and serving in leadership roles in three priority areas: ocean planning, coastal hazards resilience and ocean and coastal ecosystem health. These staff also coordinate the deployment of NOAA products and services in this region.

National Ocean Service (NOS) – [Northeast Regional Planning Body](#)

To enable more collaborative and informed ocean management decisions in New England waters, staff from the NOAA Office for Coastal Management serve as the federal co-lead for the Northeast Regional Planning Body. They bring together representatives of coastal states, federal agencies, tribes, and the Fishery Management Council to develop and implement the nation's first Northeast Ocean Plan and support the Northeast Ocean Data Portal.

National Weather Service (NWS) - Automated Surface Observing Systems [Stations](#)

The Automated Surface Observing Systems (ASOS) program is a joint effort of the National Weather Service (NWS), the Federal Aviation Administration (FAA), and the Department of Defense (DOD). ASOS serves as the Nation's primary surface weather observing network. ASOS is designed to support weather forecast activities and aviation operations and, at the same time, support the needs of the meteorological, hydrological, and climatological research communities. ASOS works non-stop, updating observations every minute, 24 hours a day, every day of the year observing basic weather elements, such as cloud cover, precipitation, wind, sea level pressure, and conditions, such as rain, snow, freezing rain, thunderstorm, and fog. There are seven ASOS stations in New Hampshire.

National Weather Service (NWS) - Cooperative Observer Program [Sites](#)

The National Weather Service (NWS) Cooperative Observer Program (COOP) is comprised of more than 10,000 volunteers who take observations on farms, in urban and suburban areas, National Parks, seashores, and mountaintops. The data are representative of where people live, work and play. The COOP was created to provide observational meteorological data, usually consisting of daily maximum and minimum temperatures, snowfall, and 24-hour precipitation totals, required to define the climate of the United States and to help measure long-term climate changes, and to provide observational meteorological data in near real-time to support forecast, warning and other public service programs of the NWS. The data are also used by other federal, state, and local entities, as well as private companies. For example, the energy sector uses COOP data to calculate the Heating and Cooling Degree Days which are used to determine individuals' energy bills monthly. There are 61 COOP sites in New Hampshire.

National Weather Service (NWS) - NOAA Weather Radio All Hazards [Transmitters](#)

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service (NWS) forecast office. NWR broadcasts official NWS warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week. Working with the Federal Communication Commission's (FCC) Emergency Alert System, NWR is an "All Hazards" radio network, making it the single source for comprehensive weather and emergency information. In conjunction with federal, state, and local emergency managers and other public officials, NWR also broadcasts warning and post-event information for all types of hazards – including natural (such as earthquakes or avalanches), environmental (such as chemical releases or oil spills), and public safety (such as 911 Telephone outages). Known as the "Voice of NOAA's National Weather Service," NWR is provided as a public service by the NWS. NWR includes 1,100 transmitters covering all 50 states, adjacent coastal waters, Puerto Rico, the U.S. Virgin Islands, and the U.S. Pacific Territories. There are seven NWR transmitters in New Hampshire.

Office of Oceanic and Atmospheric Research (OAR) – [New Hampshire Sea Grant College Program](#)

NOAA's National Sea Grant College Program is a federal-university partnership that integrates research, education and outreach. Sea Grant forms a network of 33 programs in all U.S. coastal and Great Lakes states, Puerto Rico, Lake Champlain, and Guam. The New Hampshire Sea Grant College Program provides support, leadership and expertise for marine research, education and extension in northern New England. It is dedicated to promoting the understanding, development, wise use and conservation of our ocean and coastal resources. Research focuses on aspects of marine economic development, including a range of fisheries and aquaculture topics, and coastal ecosystem health issues.

Coastal

National Marine Fisheries Service (NMFS) - [Deep-Sea Coral Research and Technology Program](#)

The Deep Sea Coral Research and Technology Program—called for in the reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act—is currently conducting a three-year field research effort off the Northeastern U.S. The 2012-2015 field research will not only improve knowledge about deep-sea life off the northeastern seaboard, but will also inform the New England and Mid-Atlantic Fishery Management Councils in their efforts to manage commercial and recreational fisheries that depend on these and other important habitats.

National Marine Fisheries Service (NMFS) - [Sea Turtle Salvage and Stranding Network](#)

The Sea Turtle Stranding and Salvage Network (STSSN) was formally established in 1980 to collect information on and document strandings of marine turtles along the U.S. Gulf of Mexico and Atlantic coasts. The network, which includes federal, state and private partners, encompasses the coastal areas of the eighteen-state region from Maine to Texas, and includes portions of the U.S. Caribbean. Data gathered by the Network helps inform bycatch reduction efforts, track factors affecting turtle health, and provide other information needed for sea turtle management and population recovery.

National Marine Fisheries Service (NMFS) - [National Marine Mammal Stranding Network](#) and [John H. Prescott Marine Mammal Rescue Assistance Grant Program](#)

The National Marine Mammal Stranding Network and its trained professionals respond to dead or live marine mammals in distress that are stranded, entangled, out of habitat or otherwise in peril. Our long-standing partnership with the Network provides valuable environmental intelligence, helping NOAA establish links among the health of marine mammals, coastal ecosystems, and coastal communities as well as develop effective conservation programs for marine mammal populations in the wild. There is one stranding network member in the state. NOAA Fisheries funds eligible members of the Stranding Network through the competitive John H. Prescott Marine Mammal Rescue Assistance Grant Program. Since 2001, \$48.2 million has been awarded to 552 grantees who raised over \$15.9 million in matching funds. In FY15, 34 grantees received \$2.7million with one award going to Seacoast Science Center, Inc.

National Ocean Service (NOS) - [Navigation Manager](#)

NOAA's navigation managers work directly with pilots, port authorities, and recreational boating organizations in New Hampshire. They help identify the navigational challenges facing marine transportation in New Hampshire and provide NOAA's resources and services that promote safe and efficient navigation. Navigation managers are on call to provide expertise and NOAA navigation response coordination in case of severe coastal weather events or other marine emergencies. The Office of Coast Survey has a navigation manager in Narragansett, RI, to support mariners and stakeholders in the Northeast region.

National Ocean Service (NOS) - [Coastal and Estuarine Land Conservation Program](#)

The Coastal and Estuarine Land Conservation Program brings conservation partners together to protect coastal and estuarine lands considered important for their ecological, conservation, recreational, historical, or aesthetic values. To date the program has protected more than 100,000 acres of land with program funds and over 16,000 acres with an in-kind match. The program provides state and local governments with matching funds to purchase coastal and estuarine lands or obtain conservation easements for important lands threatened by development. NOAA awarded nine grants in New Hampshire, and these lands are protected in perpetuity.

National Ocean Service (NOS) – [National Coastal Zone Management Program](#)

Through a unique federal-state partnership, NOAA's Office for Coastal Management works with the New Hampshire Department of Environmental Services to implement the National Coastal Zone Management Program in New Hampshire. NOAA provides the state coastal management program with financial and technical assistance to further the goals of the Coastal Zone Management Act and ensure coastal waters and lands are used in a balanced way to support jobs, reduce use conflicts, and sustain natural resources.

National Ocean Service (NOS) – [Regional Coastal Resilience Grant Award](#)

These grants help coastal communities prepare for and recover from extreme weather events, climate hazards, and changing ocean conditions. The focus is on comprehensive regional approaches that use science-based solutions and rely on collaborative partnerships. This approach expands reach and impact, thereby ensuring maximum success. In New Hampshire, the NOAA Office for Coastal Management awarded \$891,243 to the Northeast Regional Association of Coastal and Ocean Observing Systems (NERACOOS) to build resilience in coastal New England by documenting and projecting storm impacts, and implement sustainable, nature-based infrastructure management approaches (living shorelines). The region will benefit from the resulting risk assessments and the implementation of improved-upon resilience plans and strategies.

National Ocean Service (NOS) - [Scientific Support Coordinator and Regional Resource Coordinator](#)

NOAA's Office of Response and Restoration (OR&R) brings decades of experience, technical expertise and scientific analysis in response to oil and hazardous chemical spills. In addition to events that draw the national eye like Hurricane Sandy, OR&R also supports response to local emergencies. Nine regionally based Scientific Support Coordinators (SSCs) harness the input of a multi-disciplinary team to address issues such as oil slick trajectory forecasting, environmental tradeoffs, best practices, resources at risk, oil science and properties, and chemical hazard assessment to reduce risks to coastal habitats and resources. The SSC works directly with U.S. Coast Guard and the U.S. Environmental Protection Agency to provide critical scientific support to the Federal On-Scene Coordinator. OR&R also helps develop preparedness plans that identify spill response actions with the greatest environmental benefit and trains hundreds of members of the response community each year on the scientific and technical aspects of spills.

OR&R's Regional Resource Coordinators (RRCs) provide scientific and technical expertise and timely response to oil spills or hazardous materials releases to collect information, samples, and evidence that are time dependent and critical to support natural resource damage assessments throughout the coastal US. RRCs work on multi-disciplinary scientific, economic, and legal teams and are responsible for determining and quantifying injuries to NOAA trust natural resources through determination of injuries and pathway, and demonstration of causal mechanisms. The goal of the RRCs efforts is to determine, often through the Damage Assessment, Remediation, and Restoration Program, the appropriate amount and type of restoration required to restore injured NOAA trust resources and compensate the public for their lost use.

National Ocean Service (NOS) – Atlantic [Environmental Response Management Application](#)

Assessing important spatial information and designing successful restoration projects rely upon interpreting and mapping geographic information, including the location, duration, and impacts from oil spills, other hazardous materials, or debris released into the environment. Atlantic Environmental Response Management Application (ERMA®) is an online mapping tool that integrates both static and real-time data, such as Environmental Sensitivity Index maps, ship locations, weather, and ocean currents, in a centralized, easy-to-use format for environmental responders and decision makers. In 2012, Atlantic ERMA was employed as the Command Operational Picture for the U.S. Coast Guard's pollution response to Tropical Storm Sandy.

National Ocean Service (NOS) - [Marine Debris Projects and Partnerships](#)

The NOAA Marine Debris Program (MDP) leads national and international efforts to research, prevent, and reduce the impacts of marine debris. The program supports marine debris removal, education and outreach, and research projects in partnership with state and local agencies, tribes, non-governmental organizations, academia, and industry. An interactive exhibit on the sources and effects of marine debris has been developed at the Great Bay National Estuarine Research Reserve (NERR) visitor center.

National Ocean Service (NOS) - [Northeastern Regional Association of Coastal Ocean Observing Systems](#)

U.S. IOOS® is an operational system and a network of 11 regional partners responsible for regional observations, data management, modeling and analysis, education and outreach, and research and development. The overarching purpose of U.S. IOOS is to address regional and national needs for ocean data and information. The Northeastern Regional Association of Coastal Ocean Observing Systems (NERACOOS) is one of the 11 Regional Associations. NERACOOS was established to network and expand the existing observing and prediction capacities of a multitude of institutions and agencies throughout New England and Maritime Canada.

NERACOOS supports infrastructure that provides over-water meteorological and wave observations critical to safe navigation to the National Weather Service in Long Island Sound and the Gulf of Maine. These platforms also support current and dissolved oxygen sensors that provide critical information for management of hypoxia and harmful algal bloom. Fisheries managers, water quality specialists, the Coast Guard, and many others benefit from accurate and timely ocean observing infrastructure and related decision support tools. The region includes the coastal waters of Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut. There is overlap with the Mid-Atlantic Regional Association Coastal Ocean Observing System (MARACOOS), which also includes the coastal waters of Connecticut and Rhode Island. In addition, partners from the Canadian provinces of New Brunswick and Nova Scotia will be involved to ensure appropriate coverage in shared waters.

National Weather Service (NWS) - [Buoys](#)

The National Weather Service (NWS), through its National Data Buoy Center (NDBC), develops, deploys, operates, and maintains the current national data buoy network of moored and drifting weather buoys and land stations that serve all of the Nation's coastal states and territories. Within this network, 110 of the buoys and 51 of the land stations are maintained directly by NDBC. Located at NASA's Stennis Space Center in Mississippi, supports weather and marine warning and forecast services in real time by providing deep ocean and coastal meteorological and oceanographic observations. These data provide valuable information used by NWS supercomputers to produce computer-generated model forecasts of the atmosphere and climate. NDBC manages the Volunteer Observing Ship program to acquire additional meteorological and oceanographic observations supporting NWS mission requirements. NDBC also supports operational and research programs of NOAA and other national and international organizations.

[NH-1](#) [Durham](#)

National Environmental Satellite, Data, and Information Service (NESDIS) and Office of Oceanic and Atmospheric Research (OAR) - [U.S. Climate Reference Network](#)

The U.S. Climate Reference Network (USCRN) is an operationally viable research network of 135 climate stations that are deployed nationwide. Data from the USCRN are used in various climate monitoring activities and for placing current climate anomalies into an historical perspective. The USCRN provides the United States with a reference network that contributes to an International network under the auspices of the Global Climate Observing System (GCOS). NOAA's National Environmental Satellite, Data, and Information Service and NOAA's Office of Oceanic and Atmospheric Research jointly manage USCRN.

National Ocean Service (NOS) - [Cooperative Institute for Coastal and Estuarine Environmental Technology](#)

Established in 1997, the Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET) develops and applies technologies to detect, prevent, and reverse the impacts of coastal pollution and habitat degradation nationwide. CICEET is a partnership between NOAA and the University of New Hampshire. As a needs-based organization, CICEET works with coastal resource managers around the country to identify their priority environmental challenges. This analysis forms the basis of competitive funding opportunities that call for projects to develop, demonstrate, and implement technology-based solutions that coastal managers can apply to address their priority challenges.

National Ocean Service (NOS) - [Joint Hydrographic Center](#)

NOAA and the University of New Hampshire collaborate through the Joint Hydrographic Center (JHC) to expand research and education in the hydrographic and ocean mapping sciences. A national center of expertise, the JHC is challenging a new generation of upcoming hydrographers and ocean mapping scientists to meet emerging public and private needs for acquiring ever more precise data about ocean floors and the marine environment. The JHC is particularly valuable in research and development efforts to improve scientific understanding and technical capabilities for surveying and mapping. NOAA contributes personnel and significant appropriation and grants funding to the JHC; the University of New Hampshire contributes funding, faculty and staff, lab and office space, supplies and services. NOAA's Integrated Ocean and Coastal Mapping (IOCM) Processing Center is co-located at JHC. Employees at the IOCM center help create products derived from hydrography for non-navigation products such as marine debris evaluations and seafloor backscatter maps.

National Ocean Service (NOS) - [Great Bay National Estuarine Research Reserve](#)

The 10,235-acre Great Bay Research Reserve, designated in 1989 and managed by the New Hampshire Department of Fish and Game, is a "drowned river valley" estuary composed of tidal waters and mudflats, traditional New England salt marshes, mixed wood uplands, and fields that have been logged and cleared since colonial times. The Great Bay Discovery Center with indoor and outdoor exhibits describes the human and natural history of the bay for visitors, as well as local students and teachers. Research activities include studies concerning the protection of oyster beds and clam flats from polluted runoff, the flooding impacts of climate change, and the effectiveness of innovative invasive species removal techniques. Training efforts at the reserve aim to build capacity for local decision makers to implement better storm water mitigation options, low impact development, and address climate impacts to New England towns.

National Ocean Service (NOS) - [Coastal Response Research Center](#)

Sitting at the University of New Hampshire, the Coastal Response Research Center was established as a partnership between the National Oceanic Atmospheric Administration (NOAA), through the Office of Response and Restoration (OR&R), and the University of New Hampshire (UNH). The Center is administered by and located at the UNH campus in Durham, NH. This partnership stimulates innovation in spill preparedness, response, assessment, and implementation of optimum spill recovery strategies. The primary purpose of the Center is to bring together the resources of a research-oriented university and the field expertise of OR&R to conduct and oversee basic and applied research, conduct outreach, and encourage strategic partnerships in spill response, assessment and restoration. The Center involves individuals and institutions, public and private, at local, regional, national and international levels in identifying needs, evaluating and demonstrating promising technologies, and fostering their use as part of new approaches to response and restoration.

Office of Oceanic and Atmospheric Research (OAR) - [Exploration Command Center](#)

NOAA's Office of Ocean Exploration and Research focuses on interdisciplinary exploration; systematic research of extreme and unique environments, continental shelf ecosystems, new ocean resources, and ocean dynamics; advanced technology development; and communication of results through education and outreach. In addition to the Exploration Command Center at the University, OER works with the University of New Hampshire's Joint Hydrographic Center, Center for Coastal and Ocean Mapping and the Integrated Ocean and Coastal Mapping program to plan and coordinate expeditions in support of a U.S. Extended Continental Shelf. The University is also the site where much of OER's remotely operated vehicle (ROV) technical development and testing is done, and it is the key source of talent for OER's ocean mapping team. There is also an Exploration Command Center located at the University where scientists ashore participate in real time in certain expeditions at sea when seafloor video is sent ashore via satellite and Internet pathways.

[New Castle](#)

National Marine Fisheries Service (NMFS) - [Office of Law Enforcement](#)

NOAA's Office of Law Enforcement is the only conservation enforcement program (Federal or State) that is exclusively dedicated to Federal fisheries and marine resource enforcement. Its mission is to protect global marine resources by enforcing domestic laws and international treaties and obligations dedicated to protecting wildlife and their natural habitat. Our special agents and enforcement officers ensure compliance with these laws and take enforcement action if there are violations. Additionally, the Cooperative Enforcement Program allows NOAA the ability to leverage the resources and assistance of 27 coast states and U.S. territorial marine conservation law enforcement agencies in direct support of the Federal enforcement mission. Effective fisheries law enforcement is critical to creating a level playing field for U.S. fishermen and enabling sustainable fisheries to support vibrant coastal communities.

Office of Marine and Aviation Operations (OMAO) - [NOAA Ship Ferdinand R. Hassler](#)

The NOAA Ship *Ferdinand R. Hassler* is managed by NOAA's Marine Operations Center-Atlantic in Norfolk, Virginia. The ship is a Coastal Mapping Vessel utilizing the Small Waterplane Area Twin Hull (SWATH) design for improved stability and seakeeping. The newest addition to NOAA's hydrographic charting fleet, the ship is designed to operate from the Great Lakes to the Gulf of Mexico. Its primary mission is hydrographic survey in support of NOAA's nautical charting mission. The ship is also capable of performing Automated Underwater Vehicle (AUV) operations, Remotely Operated Vehicle (ROV) operations, buoy deployment and recovery, and general oceanographic research. The NOAA Ship *Ferdinand R. Hassler* supports NOAA's mission to protect, restore, and manage the use of coastal and ocean resources through an ecosystem approach to management.

The vessel is operated under the direction of officers from the NOAA Commissioned Officer Corps. The NOAA Corps today provides a cadre of professionals trained in engineering, earth sciences, oceanography, meteorology, fisheries science, and other related disciplines. Officers operate ships, fly aircraft, manage research projects, conduct diving operations, and serve in staff positions throughout NOAA.

Rye [Isle of Shoals]

Office of Oceanic and Atmospheric Research (OAR) - [Carbon Cycle Gases and Halocarbons](#)

NOAA's Earth System Research Laboratory Global Monitoring Division (ESRL/GMD) operates a small aircraft-based North American network of sampling sites to measure vertical profiles of important greenhouse gas concentrations. Air is sampled above the surface up to approximately 25,000 feet above sea level using a relatively small, light, and economical automated system developed by ESRL researchers. These air samples are delivered to ESRL/GMD in Boulder, Colorado for measurements of CO₂, CH₄, and other greenhouse gasses. This data will improve understanding and models of the global carbon cycle. Sampling is conducted bi-weekly. Some air samples from the small aircraft program are also analyzed for halocarbon gases that can destroy the stratospheric ozone layer. Halocarbon measurements help determine the effectiveness of efforts to protect and restore the ozone layer so it can protect us from the sun's ultraviolet radiation.

NH-2

Concord

Office of Oceanic and Atmospheric Research (OAR) - [Science On a Sphere® at St. Paul's School](#)

Science On a Sphere (SOS) is a room-sized global display system that uses computers and video projectors to display planetary data onto a six-foot diameter sphere, analogous to a giant animated globe. Researchers at NOAA developed Science On a Sphere® as an educational tool to help illustrate Earth System science to people of all ages. Animated images of atmospheric storms, climate change, and ocean temperature can be shown on the sphere, which is used to explain complex environmental processes in a way that is simultaneously intuitive and captivating.

Nashua

National Weather Service (NWS) - [Center Weather Service Unit](#)

Housed in the Federal Aviation Administration's Boston Air Route Traffic Control Center (ARTCC), the NWS Center Weather Service Unit (CWSU) in Nashua provides forecasts and other weather information to ARTCC personnel for use in directing the safe, smooth flow of aviation traffic. The area covered includes Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, most of Connecticut, and all of New York except the western part, and eastern Long Island, New York.

Plymouth

Office of Oceanic and Atmospheric Research (OAR) - [Hydrometeorology Testbed](#)

NOAA's Earth System Research Laboratory Physical Sciences Division (PSD) deployed a snow level radar on the campus of Plymouth State University in Plymouth, NH. The snow level, or the altitude in the atmosphere where snow changes into rain, is a critical parameter influencing runoff in mountainous watersheds because it determines the surface area of the watershed that will be exposed to rain versus snow. When the snow level is above most or all of the terrain in a watershed, a storm is more likely to produce enough rapid runoff to cause flooding. If the snow level is low in a watershed, then a storm increases the snowpack, providing valuable storage of water for potential later use. The snow-level radar, is a small, relatively inexpensive radar that was designed by ESRL/PSD and University of Colorado engineers to reliably detect the snow level during precipitation.

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NOAA In Your State



New Hampshire



NOAA

NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION
UNITED STATES DEPARTMENT OF COMMERCE

